

WARMLEY
RURAL DISTRICT COUNCIL.




ANNUAL

REPORT

. . . OF THE . . .

Medical Officer of Health

For the Year 1903.



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Warmley Rural District Council,

ANNUAL REPORT,

. . . 1903, . . .

Of the Medical Officer of Health.

GENTLEMEN,

I have much pleasure in again presenting to you the Annual Report on the health of this district for the year 1903. I must also tender you my sincere and respectful thanks for all your courtesy during the year.

The Report will in the main go over the same headings as on previous occasions, and in much the same order. I shall leave to your Surveyor, who has charge of the outfall works at Moorend, the task of reporting to you the changes in structure that have been made, the present and past conditions of efficiency, and the chemical examinations of sewage by your expert. Your Inspector of Nuisances and of Factories will also present Reports on both these subjects.

The usual Monthly Reports have been made to you during the year, as well as to the Mangotsfield Parochial Committee. I have also given you a quarterly statement of statistics. Matters of interest contained in these reports will be alluded to. For the parish of Mangotsfield, which contains more than half the population of your district, I shall give you separate statistics; and occasionally, where necessary, deal with them separately. Its interests and conditions are distinctly more urban than those of the rest of the District.

The tables supplied by the Local Government Board are identical with those of last year. A table of rain-fall has been very kindly given me by the Vicar of Pucklechurch, Rev. S. G. Gillum. In addition to these, I have obtained from the County Council in time for insertion here another table. All these tables are inserted together at the end of the Report, as well as one drawn up by your Clerk on Urban Powers in force in the district. These Urban Powers which you have obtained, along with the adoption of certain sections of certain acts, put you nearly in the position of an Urban area.

A good deal of unrest lies in the City of Bristol regarding the extension of its area. A scheme was got up there, which would have involved the inclusion of all the populous part of Mangotsfield parish. But it was very plainly shown, both at the Parish Meeting and at the Council, that Mangotsfield did not wish to participate in what Bristol calls its privileges. Bristol has built within Mangotsfield a large number of houses for boarding poor children, and now wishes to include them in its own area. But there were many quite as good and as inexpensive sites within its own extended area. The principle of allowing a powerful body like Bristol city to proceed on these lines, first to acquire property outside area, and then to include it in its area, is bad, and I hope this extension will be defeated. If it succeeds, our area and population figures will be all altered and confusion ensue. Besides, success would induce Bristol to try again. If Bristol is to be considered, so is Mangotsfield ; and I can see many disadvantages and advantages, but the advantages we can procure for ourselves at less cost. On the part of Mangotsfield there is no reason at present for any change, and there are many reasons for no change. Further, these houses are most likely to drain into the Mangotsfield sewers, and that is another good reason for retaining them within Mangotsfield parish. And, lastly, as the rates are lower in Mangotsfield than in Bristol, the Guardians of Bristol are not justified in their action.

There has been some attempt to get an increased representation for Mangotsfield, As it contains over half the population, and nearly half the rateable value, of your area, there is some ground for the attempt. It returns now only one-third of the Members.

I mentioned in last Report that the Inspector of Factories and Workshops would have considerable difficulties before him from the shifting nature of the population. He has found it so. Nevertheless a great deal of good work has been done. It has given us a good knowledge of the condition of many dwellings, and has caused a house to house visitation in a systematic way—invaluable to a health authority. If this is continued, and a record kept, the accumulated information in regard to the condition of the wage-earners of the community must become interesting and lead to action benefitting these workers.

I have mentioned that the population of Mangotsfield is urban in character. That applies, however, only to Soundwell, Staple Hill and Downend, and to the Village of Mangotsfield ; the rest of the parish is quite rural. Soundwell is continuous with Kingswood urban area on the south, and with Staple Hill on the north. The greater part of the Mangotsfield Ward of Kingswood was taken from Mangotsfield. Staple Hill is also continuous with Bristol on the west, and Downend on the north. The parish of Siston, though largely rural, contains towards Kingswood a semi-urban area at Warmley ; also continuous with Kingswood. Oldland parish has a semi-urban area at Warmley Batch and Cadbury Heath, and another along Park Wall to Longwell's Green, where it joins the parish of Hanham Abbots ; the latter parish has also a semi-urban area contiguous with Kingswood. Bitton is chiefly rural, though there are thickly-populated portions along North Common and Oldland Common, and at the Village of Bitton.

Geology.—The geological formation may be here noticed. According to *Lyall*, the upper and lower coal measures in the Bristol coal-fields are divided by the pennant ("a micacious flaggy sandstone"). Parts of the parishes of Mangotsfield, Bitton, Oldland and Hanham Abbots lie on the upper coal measures. The dividing pennant crops out here and there very frequently, and is quarried for many purposes, such as building-stone, monumental-stone, etc. Overlying the pennant in Soundwell, Siston Common, and Staple Hill, is a thick bed of clay, which is used for brick and tile making. Towards Siston Common and Siston Hill a thin bed of soft shale crops to the surface, but the upper part of Siston parish, with the rural part of Bitton parish and the Village of Bitton, lie on the lower lias. The slopes of Golden Valley show an outcrop of new red, with a tongue of lias around the coal there. Another small portion of new red crops out at Mangotsfield Station.

The general conformation of the surface is undulating. There is a considerable rise from the Avon, which bounds your area on the south, to the slopes of the Lansdown Hills ; and again from the Frome and Folly Brook, which constitutes your boundaries on the north, to the top of Hopewell Hill, near Kingswood, on the south.

Two small streams run through the district. The Siston Brook forms the boundary on the Kingswood side, as far as Warmley, after which it runs through your district till it joins the Avon at Londonderry. The River Boyd rises in the high grounds round Pucklechurch, Westerleigh, Wick, and Bitton, and flows through Golden Valley, also to join the Avon. The urban districts of Bristol and Kingswood close you in on the south and west, while to the north and east lie the rural districts of Barton Regis, Chipping Sodbury, and Keynsham. The whole area, except where the clay comes to the surface, is covered by a pervious or rocky soil, is easily drained, and possess, as at Frenchay and Bitton, spots of great beauty.

The inhabitants of your area consist of the lower middle, but chiefly of the working-class. As in every working-class area, there is a goodly number who class themselves as working-men, but who never do any constant work. The staple industries are coal-mining and shoe-making. All the coal-pits, save one, now employing these miners are in surrounding areas. There are five or six fairly large shoe factories in your district, but most of the shoemakers find employment at the factories of Kingswood and Bristol; a large proportion of them do their work at home, in the kitchen, back-kitchen, or a small workshop built behind the house. Your Inspector, so far as he has been able to go over them, will tell you of their condition; but I may say that, generally speaking, they are by no means models of sanitation. They are, not infrequently, overcrowded, badly ventilated, badly lighted, with roof too low, and floor neither clean nor dry; and a great many are not kept as clean as they might be. Moreover, the shoemakers, as a class, are by no means so clean as the miners. The coal-miners work in well-ventilated mines, and comparatively few accidents occur amongst them. I do not think phthisis, or other respiratory disease, occurs more frequently among them than among others of the community. Emphysema occurs amongst the branchers, but that is due to their entering the heading before the smoke of a shot has cleared away.

The factories in your district are well built, well ventilated, well lighted, and well conducted. The sanitary appliances are for the most part adequate, and, with two exceptions, the egress in case of fire is fairly good. The workers in these factories have average health.

Besides the boot factories, there is a large paper mill at Bitton, employing many hands; a stay factory on Oldland Common, which I have always pointed out as a model for others; and a clothing factory on Staple Hill, which is not far behind. Brick and tile making is carried on at Warmley, and at Shortwood, just outside your area, where many from your district are employed. Quarrying of pennant stone employs a goodly number of men, and lime-burning employs others. Market-gardening is becoming every year a larger industry, owing to the proximity of the City of Bristol.

Many men are employed in different industries in Bristol, such as cocoa and chocolate making, tobacco manufacturing, etc. Others, again, are employed in agricultural pursuits, such as dairy farming and grain growing.

The women are employed in paper-making, light shoe-making, boot-closing, stay-making, and tailoring. The four last mentioned are chiefly conducted at home, and generally in the kitchen. Except amongst the shoemakers, the kitchens are very fairly clean; but I find the air overheated and giving off foul smells. These workshops are not constructed properly, as they are mostly constructed primarily as kitchens. Many of these houses are cottages, so that when a case of infectious disease occurs in one of them, no isolation

is possible, the work is stopped, and the inmates, in a week or two, thrown on the parish. Worse, however, than that happens. There is a great inducement to hide cases of mild epidemic disease. I have often found this to be the case, associated with a strong assumption of ignorance difficult to deal with. It leads to a constant spread of epidemic disease to us from Kingswood and Bristol, and *vice versâ*.

The Isolation Hospital, which has been under consideration for so long is still in the same stage. But I was considerably astonished to learn, not many months ago, that we still have a share in the one at Keynsham. I am still of opinion that Keynsham is a very inconvenient place for the bulk of our population, that a more convenient place could be got, and that Kingswood is our natural ally. I am also sure that it would be better to have a permanent establishment at the Hospital, both because it would be needed and because setting up a temporary establishment is a costly matter.

The cottages in your area are of good size, consisting of three or four good rooms, well lighted, well ventilated, and fairly clean. There are very few back-to-back houses, and some are small, dirty, and damp. A good many have been improved during the year.

Cases of overcrowding are not common, and are dealt with as they arise. The gypsies, who settle amongst us every winter, have always overcrowded vans or houses. They always create a nuisance, which they are summoned to abate, when they generally move.

Sewerage and Drainage.—In the parish of Mangotsfield a drainage scheme has been in operation for some years. The outfall works are at Moorend, and the effluent is poured into a small stream which joins the Frome. The sewage from the main sewer falls on to a grid, and is then passed into large, deep, dark, and airless tanks, whence it is conducted over filters of clinkers. The effluent from these then passes through land. Analyses are occasionally made by Mr. Waterfall, Analytical Chemist, to ensure the proper working of the works; and I understand the results have been good during the year. I have not heard any complaints this year by neighbouring Local Authorities. Your Surveyor is now in charge and will report.

The sewers seem to be equal to their work. Land water still enters, and, no doubt, sewage gets out, but as soon as any fault is found it is remedied. I still have to complain of the large number of houses, whose water-closets are hand flushed. If the flushing is done regularly and at short intervals, the system works well enough; but in cottage property, where this plan most frequently obtains, the inhabitants are most careless, the water-closets become filled to the brim, and the flushing causes a large deposit of decomposing material to be rushed to the small house-drains, where stoppages frequently occur, giving rise to little lakes of decomposing sewage.

Privies and cesspools still exist in the parish, but are chiefly confined to places where the sewers are inaccessible. In the rest of your area, comprising the four parishes of Oldland, Siston, Bitton, and Hanham, no system of sewerage exists. Each house has its own privy or cesspool, or occasionally, two or three houses may have a common cesspool. For the most part the gardens are large enough to utilize the material. There are a few parts more populous than the rest, *e.g.*, Warmley, Warmley Batch, Cadbury Heath, Longwell's Green, North Common, Oldland Common, and Bitton Village. The houses in these parts more or less pollute the brooks quite directly, while over all the area the cesspools are designedly leaky constructions, which must cause contamination to the underground water and wells. The amelioration of this state of things takes time, as both owners and tenants oppose to it the *vis inertiae*. The general use of earth closets would obviate a part of the dirt and danger thus engendered.

I have still to complain of the manner in which the cesspool at Cadbury Heath School is cleansed. It is quite an easy matter to rectify.

Scavenging.—The removal of house refuse in Mangotsfield parish is done by contract twice a week. In the remainder of the district each family disposes of its own.

Lighting.—This has been begun in Mangotsfield by the erection of lamp-posts, some containing oil lamps and some incandescent gas burners. But lighting is not yet general, although it is likely to be so during the year.

Water Supply.—The West Gloucestershire Water Company is the chief distributor of water over the district; its mains are laid over all the area, except to a few rural parts, where it would not pay, and where it is not needed. Cottages and farms are for the most part supplied by wells in these latter parts. Many of the wells might be better guarded, and more care taken to prevent pollution. A good deal of improvement has taken place during the year. But I have still the old complaints to make; at Dibden Farm and at Barton Farm the supplies are the same as of old. During the rainy months of last year there was no insufficiency, but, in the event of a dry summer, the same condition will again arise, and nothing has been done to render the supply sufficient. Viney Green supply has been improved, but a great deal remains to be done. The supply at Blackhorse Cottages still remains bad and insufficient. Your own cottage at Moorend has no proper supply, nor the cottages at Moorend. Pomphrey and Webb's Heath still remain as before. I condemned several supplies at North Common, where you have to pay a guaranteed rate, but, so far as I know, only one place took in the water from the Company. Some other action has been taken, but without result. I am of opinion that legal proceedings ought to be taken to enforce these people to have pure water, when so easily obtainable.

The West Gloucestershire supply has been during the year pure and sufficient. I examine it at intervals of three months, and as I use it in my own house, if any suspicion arose in my mind, I should examine it at once. The pumping power is equal to 1,000,000 gallons daily. The water is raised from an old disused iron mine in the pennant. The gathering ground is a very large area comprising the southern slopes of the Cotswolds, and it has to pass through varied strata containing lime. It is, therefore, hard; but the hardness is diminished by certain mechanical means at the Works. The number of new connections during 1903 was 77.

I have examined 43 samples of water from wells and brooks—condemned 30 (foul), 4 doubtful, and 9 good.

Slaughter Houses.—These are better than last year, but not yet, by any means, model structures. Pigs are slaughtered often in the open air, or in sheds, where the surroundings are not clean, but improvement has taken place. Inspection of slaughter-houses has had a good effect, in the institution of cleanliness, of properly-constructed houses, so far as the new ones are concerned.

Dairies, Cow-sheds, and Milk Shops.—The order concerning these has been in force since 1887, but not till ten years later was it enforced. A register was then made out and has been kept up to date. Constant visitation and supervision have been made. With regard to the large dairies everything has been done according to order and bye-laws. The cow-sheds of the smaller farms have been overhauled and improved, but a good deal requires yet to be done. The milkshops are difficult to watch. Many sell a quart or a gallon of milk per day, and this is kept in an open general shop. There seems little possibility of stopping this kind of thing, for as soon as one is closed another is opened. I have seen fish, meat, vegetables, and groceries, in the same shop as an open, wide-mouthed dish of milk for sale. However, most of the milk passes straight from the dairyman to the consumer.

Bakehouses.—There are 21 regular bakehouses in this district belonging to people who make this their chief business. These bakehouses are all in good condition. They are inspected from time to time. Many of them come under Factory inspection, as they use steam power. There is no difficulty in getting any reasonable improvement done. But there are some small bakeries, using two or three sacks a week, which contain ovens situated amidst some other buildings, and which are not, though cleanly, properly situated or constructed for the purpose. These are occupied by people who have no special knowledge of baking, and certainly less of general sanitary appliances exercised in the trade. Some of these have been stopped, but others are always arising. There is no compulsory registration of these places and anyone may erect what he calls an oven and begin baking for sale. The utmost vigilance has to be exercised.

Factories and Workshops.—Your Inspector's report is appended.

Nuisances.—Your Inspector's report is appended.

Infectious Diseases.—The Notification Act of 1889 and the Prevention Act of 1890, have been in force here almost since their passing. They have been worked as vigorously as circumstances allowed. I believe we have still a share in the Hospital at Keynsham. This contains 12 beds of which we have control over six. When a case is sent there the establishment has to be made up, by which great delay is caused. Its situation is seven miles from the bulk of our population. The ambulance is a cab, and a horse has to be hired on each occasion, and the cab disinfected. The disinfector (a Lyon apparatus) is also at Keynsham. Clothes have to be carried there in an uncovered conveyance for which a horse has to be hired, and this wastes a long day of your Inspector's time, while he ought to be otherwise employed. Taking all these inconveniences, which are real—not fanciful, into consideration, it seems to me that a junction with Kingswood would be our best move. I drew up a report on what we wanted, along with Dr. Perrott, M.O.H. for Kingswood, and there was some activity shown by both Councils in the matter. I understand there is great difficulty in getting a suitable site; but the activity has passed into passivity, and we are no further forward than we were at the time of writing my last report. I understand there is now some notion of Keynsham joining Kingswood and ourselves. But if the Hospital is to be placed out of district 6 or 7 miles away from almost 20,000 of its inhabitants I object to the union; because Kingswood and ourselves could get a site very much more central, and everything—Hospital, Disinfector, Ambulance, and covered Cart, would be all much nearer.

I am thinking just now of a Hospital for infectious diseases other than smallpox. To have a smallpox Isolation Hospital, it must be separate by a considerable distance from the general Hospital, and that would involve the acquisition of much land. But the present Hospital could be still retained for smallpox, which was its original purpose, and the new Hospital, or Hospitals, used for cases other than smallpox. I am sure the building of such an institution would be beneficial to the neighbourhoods, and is your statutory duty; and I also hope that another year will not pass away without some concrete action being taken.

I am aware that the element of expense enters into the consideration of such a subject by the Council, but I am rather of opinion that in a Hospital where cases are properly treated the death-rate would be reduced; and, let us say, the father of a family is saved to work for that family, the rates would be saved the expense of keeping that family. Other instances I could bring to show that though the Sanitary Rate is raised the Poor rate, payable by the same people, would be, if not proportionately, at least considerably, reduced. And again, although the aggregate of a body has to be considered, the individual has also to be considered.

Our contiguity to Bristol and its ports, with a large navvy population at Avonmouth, some of whom live in your area, render us liable to an incursion of infectious diseases. A Hospital near us, and always ready, is now more than ever an urgent necessity.

Notification—These have numbered 143 in all. They are distributed among 4 diseases, viz. : Diphtheria, 27, as against 22 last year ; Erysipelas, 23, as against 19 last year ; Scarlet Fever, 89, as against 96 last year ; and Enteric Fever, 4, as against 8 last year. No Puerperal cases occurred in 1903. The greater number of Diphtheria cases occurred in Hanham Abbots, contiguous to Hanham, a part of Kingswood. The Scarlet Fever cases have always been present in small numbers at a time, scattered over the whole district. When a house becomes infected by either of these diseases, I have, all the year, kept the family out of school until all trace of the disease is gone. This has to all appearance worked well.

Small-pox.—No cases. I understand the condition of our Vaccination is improving ; and I think we should leave no stone unturned to have it complete. I entered into the matter fully last year ; and I do not think that I have any word to add. I only wish to say that my belief in efficient vaccination and re-vaccination is more profound than ever.

Scarlatina.—Although the number (89) of notifications has been large, there has only been one death, which points to the fact that the disease still remains of a mild type.

Diphtheria.—27 Notifications of this disease have been sent to me, and 6 deaths have occurred. Some of these cases, no doubt, might have been saved in Hospital. A case mortality of 4·5 is heavy. I asked the Board to sanction the free use of antitoxin in cases amongst the poor, and that was given as a health-measure.

Enteric Fever.—Four cases were notified, as against eight last year, and one died. They were all in contact with others outside our area, and no new cases arose from them.

Measles.—This disease gave rise to a few cases of illness but no deaths. It was not epidemic during the year.

Influenza.—This disease was in epidemic form during the winter and early spring over the whole district, and distinctly showed again its mode of travel from the railway stations, along what may be termed trade routes. Two deaths were attributed to it or its sequelae.

Diarrhœa and Dysentery.—On account of the colder weather of July, August, and September, there were really but a few cases of epidemic Diarrhœa, which gave rise to two deaths ; but Enteritis gave rise to six deaths. One of the deaths from Diarrhœa was that of a person aged 80, while four of the cases of Enteritis were those of infants under one year, all called Gastro-Enteritis. From what I know of the method of nomenclature in this district, I should be inclined to take all cases of Gastro-

Enteritis under the heading of Diarrhœa rather than under the heading of Enteritis. Unless notified to the contrary I shall do so in a future report.

Phthisis, or Tubercular Diseases.—I classify these two groups together, as they proceed from the same etiological cause. Phthisis gave rise to 12 deaths, and other tubercular diseases to 7 deaths—a total of 19. I find that home open-air treatment is practised in this district to a considerable extent with fair results. There does not seem to me any reason why home treatment cannot accomplish good results, provided the physician inculcates proper rules, and has the influence over his patient and family to carry them out. Of course, there is always the danger to others through carelessness. A hospital regimen for, say one or two months, would be a great help. But there is always the difficulty for the poor to obtain that. I think that the Sanatoria are crowded with those who are able to pay, and that those who are unable are often kept out. The Sanatoria which charge are all too expensive for the working-man.

Mumps, Chicken-pox, and Pertussis have been practically absent from the district for the whole year, and at any rate gave rise to no deaths.

Sale of Food and Drugs Act.—I am not aware of any action taken under this Act.

Vital Statistics.—

Acreage, 96,82 acres	} estimated.
Population, 1891, 13,539	
„ 1901, 15,954	(census).
„ 1903,	(middle of year) estimated.

It is highly probable that the estimate of population is rather high, as the factors which operated during the latter half of the last decade are not acting so vigorously now. The opening of a railway station at Staple Hill, and the arrival of tramways forced a population into this district, which was then made practically a suburb of Bristol. The want of lighting has had a considerable effect in stopping this immigration; but now that lighting is going on we may have in the near future a considerable increase.

Births.—The total number of births was 460. This is considerably below the average, as seen in Table I. The birth rate is 27·33. Only in 1900 was the total number of births lower, and then the rate was a little higher.

Deaths.—The total number of deaths was 177, and of these 7 died in Keynsham Workhouse. The death rate was 10·51, as corrected. This is by far the lowest rate I have known. The natural increase of population, *i.e.* the excess of births over deaths was 283.

Infant Mortality.—There were 42 deaths of infants under one year of age, and as 460 were born, the rate was 91·3. This is a considerable reduction; in fact, the rate is the lowest known to me in this district.

Zymotic Death Rate.—Deaths arising from these diseases are as follows :—Scarlet Fever, 1 ; Diphtheria, 6 ; Enteric Fever, 1 ; and Diarrhœa, 2 ; giving a total of 10 and a rate of '59.

The other rates you will find in the County Council's Table at the end. There can be no safe deductions drawn from these figures, they cover too small an area. For instance, the Zymotic death rate this year was '59, as compared with 1'21 for 1902, and yet the incidence of these diseases was 143 to 147 in 1902.

Vital Statistics of Mangotsfield.—

Population, 9,160

,, 8,815 (census).

Births.—The total births were 264, consisting of 144 males and 120 females. The birth rate, 28'82, is slightly higher than that of the whole area.

Deaths.—The total deaths were 88, giving a rate of 8'6. This is slightly under the death rate of the whole area. The natural increase is 176. Both the birth rate and death rate, especially the latter, are low.

Infant Mortality.—17 deaths, under one year of age, occurred in this parish, and as the births were 264, the infant mortality rate is 64'39. The premature births were 7.

Zymotic Death Rate.—There were 6 deaths from these diseases, viz. :—4 from Diphtheria, 1 from Enteric Fever, and 1 from Diarrhœa. The Zymotic death rate, therefore, was 65.

I beg, in conclusion, to thank my fellow officers for their kindness and support during the year 1903.

WM. MURRAY, M.D., &c.,

Medical Officer of Health.

Copy of Form which Medical Officers of Health in the County of Gloucester are requested by the Sanitary Committee of the County Council to fill up.

TABLE C. 1904.

Water Supply—

Quality	...	...	...	Good.
Any extensions or change during 1903 ?	...	...	...	Yes.
Any inadequacy in any part ?	...	...	...	Yes. See Report.

Sewerage and Sewage Disposal—

Excrement disposal—System in vogue ?	...	...	...	Water Carriage to Works. On Bacterial plan.
Defects (if any)...	...	...	...	See Surveyor's Report, Mangotsfield

Scavenging—

Are privy middens, etc., cleansed by District Council, by Contractors, or by owners and tenants ?	...	...	...	By the owners and tenants.
Is house refuse removed by District Council ?	...	...	...	Yes, in Mangotsfield parish only.

Adoptive Acts—

Public Health Acts (Amendment Act) 1890	...	...	...	Yes.
Infectious Disease (Prevention) Act, 1890	...	...	...	Yes.

Bye-Laws—

Are Bye-Laws in force in your District, as to				
(1) Nuisances	...	...	...	Yes.
(2) Common Lodging Houses	...	...	...	There are none.
(3) Houses Let in Lodgings	...	...	...	There are none.
(4) Tents and Vans	...	...	...	Yes.
(5) New Streets and Buildings	...	...	...	Yes.
(6) Slaughter Houses	...	...	...	Yes.
(7) Dairies, Cowsheds & Milk-shops	...	...	...	Yes.
(8) Offensive Trades	...	...	...	There are none.
				All adoptive Sections and Acts are in force.

Regulated Buildings, Trades, &c., Registered—

Slaughter Houses	(11)	General Conditions fairly good.
Bakehouses	(15) ..	...
Dairies	(63) ...	...
Cowsheds			
Milk-shops			
Offensive Trades	None.

Isolation Hospital—

No. of Beds	...	...	...	12, of which 6 are available.
Disinfecting Apparatus	...	...	...	Yes.
Type of same	...	...	...	Lyon.

Dwellings—

No. of Houses built during 1903 ...	69.
General character	Chiefly from 6 to 8 rooms.
Any Houses unfit for habitation ?...	Some in Bitton parish.
Any overcrowding in Houses ? ...	Not now known.
Any action taken under the Housing of the Working Classes Act, 1890	No.

Miscellaneous—

Is House-to-house Inspection sys- tematically made ?	Yes.
Total No. of Nuisances reported during 1903	23.
Ditto abated during 1903 ...	23.
Total No. of Summonses or other Legal Proceedings	None. Inspection visits enough.
Vaccination—General efficiency ...	Not good.

What action has been taken in regard to the following matters ?

Seizure of unsound food—Prosecu- tions	None.
River pollution	None this year. I think an injunc- tion still lies over Kingswood for Siston Brook.
Smoke abatement	None.
Inspection of Factories and Workshops—	
1. No. of Workshops on Register	341.
2. „ Out-workers „	760.
Schools—(a) No. in District ...	10.
(b) General sanitary con- ditions	Very satisfactory.

Summary of Vital Statistics—

Birth Rate (See Table I.)

Zymotic	Death Rate	·71
Phthisis	„	·71
Smallpox	„	nil.
Scarlet Fever	„	·059
Whooping Cough	„	nil.
Diarrhœa	„	·012 nearly
Cancer	„	} ·029
Malignant disease	„	

Net Death Rate (See Table I.)

Infantile Mortality	91·30
Respiratory Death Rate	1·6 & ·63
Measles	„ nil.
Diphtheria	} ·35
Membranous Croup	
Fever Death Rate	·06 nearly
Enteritis	„ ·36 „

Sanitary Requirements of District, and Suggestions of Medical Officer of Health.—See Report.

(Signed) WM. MURRAY,
Medical Officer of Health for the Rural District of Warmley.

To the Warmley Rural District Council.

GENTLEMEN,

I beg to submit to you the following Report, showing the amount of work done in your district during the year 1903.

Infectious diseases	143
Houses disinfected after infectious diseases...	143
Samples of water taken and sent for analysis ...	43
Dangerous and dilapidated tenements dealt with ...	2
Cesspits cleansed and repaired	21
Foul ditches cleansed	5
Number of wells closed	3
Defective drains repaired	19
Notices served to abate nuisances, &c.	23
Gipsies' vans removed on account of nuisance ...	27
Visits to houses on notification of infectious diseases ...	143
New cesspits	3
Loads of refuse matter removed	13
Houses inspected in the parish of Mangotsfield with a view to connecting them with main sewer ...	28
Bakehouses inspected	15
Slaughter-houses inspected	11
W.C.'s repaired	5
New W.C.'s	3
Total number of visits and re-visits in order to secure completion of work	297
Articles of bedding and clothing disinfected ; all articles of bedding, clothing, &c., disinfected in the homes	
Factories, workshops, and work places inspected ...	341
Dangerous quarries fenced	2
Dairies and milkshops inspected...	63
Cases of overcrowding abated	1
Houses supplied with Company's water	77

Factories and Workshops Act.

During the year I have obtained lists of the names of out-workers living within your Council's area, who receive work from various employers in the city of Bristol, including Barton Regis, also from the factories in your own district, together with those of Kingswood.

The total number of names of out-workers contained in these lists amount to 760. I have inspected during the year the greater portion of the homes where this work is being done, and I think it only fair to state that a careful inspection of the homes of these out-workers living in your district reveals the fact that the cleanliness of the homes, together with the sanitary conditions of the premises, in the great majority of cases, are very satisfactory. In only a few cases has it been necessary to serve notices for whitewashing, &c., and these have been complied with. This statement might also be applied to the factories in your district.

The sanitary condition of the district generally shows a marked improvement upon preceding years.

C. R. CROSS,

Inspector of Nuisances.

GENTLEMEN,

Hereunder I have pleasure in giving the results of the Analytical Examination of the effluents, etc., at the Mangotsfield Sewage Works, made by C. J. WATERFALL, Esq., F.I.C.

	Sewage.	Filter effluent.	Land effluent.	Stream.
	Pts. per 100,000	Pts. per 100,000	Pts. per 100,000	Pts. per 100,000
Free Ammonia	2.27	2.68	0.404	.217
Albuminoid Ammonia ...	0.89	0.20	0.133	.212
Chlorine	12.78	7.10	3.55	3.99
Oxygen absorbed in 3 min.	—	—	—	—
" " 1 hour	1.81	0.81	0.78	0.62
" " 4 hours	2.463	1.07	0.88	0.72
Total Solids	104	104	84	44
Solids in suspension ...	18	2	3	2
Nitrates	—	2.55	2.44	2.49
Odour	moderate	good	good	excellent
Foaming	considerable	good	very fair	very good
Colour	an average sewage	very fair	a little discoloured from heavy rainfall	slight discolouration from heavy rains
Remarks	a very large volume of sewage coming down	this filter effluent shows excellent nitrification	a now putrescible effluent, showing very good nitrification under adverse conditions	stream tanks and bed nice and clean

Your obedient servant,

HENRY M. BENNETT,

Surveyor.

TABLE I.

Vital Statistics of Whole District during 1903 and previous years.

YEAR	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT					TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT. WORK-HOUSE	Deaths of Non-residents registered in Public Institutions in the District	Deaths of Residents registered in Public Institutions beyond the District	NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT	
		Number	Rate*	Under 1 Year of Age		At all Ages		Number				Rate*	
				Number	Rate per 1,000 Births registered	Number	Rate*						
1	2	3	4	5	6	7	8	9	10	11	12	13	
1894	14277	469	32'85	77	164'17	223	15'61	No Public Institution in the District.	No means	of knowing.	123	15'61	
1895	14533	524	36'05	67	127'86	193	13'27		...		137	13'69	
1896	15200	510	33'55	55	107'84	212	13'88		1		107	13'81	
1897	15500	481	31'03	78	162'16	275	17'74		10		111	17'54	
1898	15700	491	31'27	67	136'45	237	15'09		...		108	15'67	
1899	15950	507	31'78	89	175'54	256	18'03		...		110	16'05	
1900	16200	449	27'71	56	122'49	211	13'02		1		108	13'21	
1901	16122	463	28'73	64	138'23	216	13'40		...		118	13'96	
1902	16510	496	30'04	64	129'03	215	13'22		...				
Averages for years 1893-1902	15443'5	477'7	31'44'5	68'5	138'19	224'4	14'58		1'8	6 nearly.	115'2	14'79	
1903	16830	460	27'33	42	91'03	170	10'10		...	7	77	10'51	

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 9,682. Total population at all ages (at Census of 1901)—15,954.

Number of inhabited houses, 3,625 and average number of persons per house, 4'4 (at Census of 1901).

TABLE II.Vital Statistics of separate Localities in **1902** and previous years.

YEAR	NAMES OF LOCALITIES							
	WHOLE DISTRICT				PARISH OF MANGOTSFIELD			
	Population esti- mated to middle of each Year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each Year	Births registered	Deaths at all Ages	Deaths under 1 year
1894	1427	469	223	77	...	...	...	...
1895	14533	524	199	97	...	...	...	...
1896	15200	570	211	55	...	...	...	...
1897	15500	481	272	78	...	...	...	...
1898	15700	491	246	67	...	...	...	...
1899	15950	507	256	89	...	...	...	...
1900	16200	449	214	56	...	...	...	...
1901	16112	463	225	64	8815	262	134	38
1902	16510	496	227	64	9000	270	120	33
Averages of Years 1894-1901 }	15433'5	477'7	230'3	68'5	8907	266	127	35'5
1903	16830	460	177	42	9180	264	88	17

TABLE III.

Cases of **Infectious Disease** notified during the Year **1903**.

NOTIFIABLE DISEASE	CASES NOTIFIED IN WHOLE DISTRICT							TOTAL CASES NOTIFIED IN EACH LOCALITY.	NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY
	At all Ages	At Ages—Years						PARISH OF MANGOTS- FIELD.	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and up- wards		
Small-pox ... ..	...	...	...	...	...	...	...	...	...
Cholera ... ..	...	...	...	...	...	...	...	...	...
Diphtheria	27	...	11	15	...	1	...	16	...
Membranous croup ...	...	...	...	...	...	...	...	...	...
Erysipelas... ..	23	...	1	3	1	13	5	12	...
Scarlet fever	89	...	26	51	11	1	...	49	...
Typhus fever ... ..	...	...	...	...	...	...	...	...	...
Enteric fever	4	...	...	1	...	3	...	2	...
Relapsing fever ... ..	...	...	...	...	...	...	...	...	...
Continued fever ... ..	...	...	...	...	...	...	...	...	...
Puerperal fever ... ..	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...
Totals	143	...	38	70	12	18	5	79	...

Isolation Hospital—Keynsham Isolation Hospital, in Keynsham Parish.

TABLE IV.

Causes of, and Ages at, Death, during the Year 1903.

CAUSES OF DEATH I	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES							DEATHS IN MANGOTSFIELD PARISH AT ALL AGES.
	All ages 2	Under 1 year 3	1 and under 5 4	5 and under 15 5	15 and under 25 6	25 and under 65 7	65 and up- wards 8	
Smallpox ... ..	...	...	...	...	...	...	...	...
Measles ... ..	...	...	...	...	...	...	...	...
Scarlet fever	1	1	...	...	...	...	...	...
Whooping-cough ... ..	...	...	...	...	...	...	...	...
Diphtheria and membranous croup }	6	...	2	4	...	...	...	4
Croup ... ..	...	...	...	...	...	...	...	...
Fever { Typhus ... ..	...	...	...	...	...	...	...	...
	1	...	...	...	...	1	...	1

Epidemic influenza	2	...	...	...	...	...	2	1
Cholera ... ..	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Diarrhœa	2	1	...	...	...	...	1	1
Enteritis	6	5	1	...	...	...	...	1
Puerperal fever ... ..	...	...	...	...	...	...	...	...
Erysipelas ... ..	...	...	...	...	...	...	...	...
Other septic diseases }	...	...	...	...	...	...	...	...
Phthisis	12	1	...	...	...	11	...	9
Other tubercular diseases }	7	1	2	2	...	2	...	4
Cancer, malignant disease }	5	...	...	...	...	4	1	3
Bronchitis	10	...	...	...	...	5	5	5
Pneumonia	18	5	3	3	1	3	3	6
Pleurisy ... ..	...	...	...	...	...	...	...	...
Other diseases of respiratory organs }	2	...	...	...	...	1	1	1
Alcoholism	1	...	...	...	...	1	...	...
Cirrhosis of liver	...	...	...	...	...	...	...	...
Venereal diseases ... ..	...	...	...	...	...	...	...	...
Premature birth	9	9	...	...	...	...	...	7
Diseases and acci- dents of parturition }	...	...	...	...	...	...	...	...
Heart diseases	20	1	...	1	1	7	10	14
Accidents	4	...	2	...	...	1	1	3
Suicides	3	...	...	...	2	1	...	1
All other causes	68	20	2	...	...	15	31	27
All causes	177	44	12	10	4	52	55	88

In recording the facts under the various headings of Tables I, II, III, and IV, attention has been given to the notes on the Tables.

January, 1904.

WM. MURRAY, *Medical Officer of Health.*

TABLE V.

RAINFALL IN 1903, AT PUCKLECHURCH VICARAGE, in the County of Gloucester.

RAIN GAUGE—

Diameter of Funnel: 5 inches. Height of Top: above ground, 10 inches ;
above sea level, 370 feet.

Month	Total Depth	Greatest fall in 24 Hours		No. of Days on which '01 or more fell
		Depth	Date	
January ...	3'74	'99	4	18
February ...	1'58	'47	24	9
March ..	3'89	'97	1	19
April	2'94	1'05	26	10
May	4'09	'47	16	17
June	4'23	1'47	14	9
July	1'80	'41	21	15
August ...	3'84	'50	24	19
September ...	2'98	'51	28	15
October ...	1'43	1'10	11	27
November ...	2'10	'72	27	16
December ...	2'72	88	11	18
Total ...	41'34			192

(Signed) S. G. GILLUM.

